PROGRAM CHAIRMAN
David Kritchevsky

PROGRAM

List of Participants ................................................. 3681

PLENARY SESSION

Introduction to the Workshop on Fat and Cancer.
David Kritchevsky and Diane J. Fink .................................. 3684
Epidemiological Correlations between Diet and Cancer Frequency.
Pelayo Correa .......................................................... 3685
Techniques for Carcinogenicity Studies.
Elizabeth K. Weisburger ............................................... 3690
Neutral Fats and Cancer.
Kenneth K. Carroll .................................................... 3695
Dietary Fat and Its Relationship to Large Bowel Cancer.
Bandaru S. Reddy ........................................................ 3700
Lipids and Immune Function.
Joseph J. Vitale and Selwyn A. Broitman ............................ 3706
Obesity, Hormones, and Cancer.
Marvin A. Kirschner, Norman Ertel, and George Schneider ........ 3711
Lipids and Atherosclerosis.
Ivan D. Frantz, Jr. ....................................................... 3718

WORKING GROUP I

Epidemiology—Lipid-related Studies

Chairperson: Ernst L. Wynder
Rapporteur: Saxon Graham

Reassessment of the Role of Dietary Fat in Cancer Etiology.
James E. Enstrom ....................................................... 3722
Protocol for a Study of Nutritional Factors and the Low Risk of Colon Cancer in Southern Retirement Areas.
Regina G. Ziegler, William J. Blot, Robert Hoover, William A. Blattner, and Joseph F. Fraumeni, Jr. .......................... 3724
Dietary Fat Intake and Cancer Incidence among Five Ethnic Groups in Hawaii.
Laurence N. Kolonel, Jean H. Hankin, Abraham M. Nomura, and Susan Y. Chu .................................................. 3727
Food Supply Studies and Consumption Survey Statistics on Fat in United States Diets.
Robert L. Rizek ............................................................ 3729
Some Methodological Issues in Epidemiological Studies of Fat and Cancer.
G. R. Howe ................................................................. 3731
Summary of Deliberations.
Saxon Graham ............................................................. 3733

WORKING GROUP II

Fatty Acids, Steroids, and Cancer

Chairperson: Gilbert A. Leveille
Rapporteur: Adrianne E. Rogers

Introduction.
Gilbert A. Leveille ....................................................... 3734
Mammary Carcinogenesis in Rats Fed Different Amounts and Types of Fat.
Adrienne E. Rogers and William C. Wetsel .................................. 3735
Cholesterol Excretion and Colon Cancer.
Selwyn A. Broitman ....................................................... 3738

3678

CANCER RESEARCH VOL. 41
Effects of Dietary Fat on Incidence of Spontaneous and Induced Cancer in Mice.

R. R. Brown ........................................... 3741

Comments on the Effects of Dietary trans-Fatty Acids in Humans.

Mark Keeney ........................................... 3743

Evidence That the Effectiveness of Antioxidants as Inhibitors of 7,12-Dimethylbenz(a)anthracene-induced Mammary Tumors Is a Function of Dietary Fat Composition.

Paul B. McCay, M. Margaret King, and Jan V. Pitha ........................................... 3745

The Need for Comprehensive Diet Studies to Assess the Relation of Lipids to Cancer.

Ann W. Sorenson and Joseph C. Street ........................................... 3748

Effects of Dietary Essential Fatty Acids on Murine Mammary Gland Development.

Richard A. Knazek and Sue C. Liu ........................................... 3750

Summary of Proceedings.

G. A. Leveille and A. E. Rogers ........................................... 3752

WORKING GROUP III

Lipid Metabolites and Intestinal Flora

Chairperson: George V. Vahouny
Rapporteur: Ruth Kay

Introduction.

George V. Vahouny and Ruth Kay ........................................... 3755

Bile Acid Synthesis in Humans.

Leon Swell, Jan Gustafsson, Henry Danielsson, Charles C. Schwartz, L. Gregg Halloran, and Z. Reno Vlahcevic ........................................... 3757

Effects of Bile Acids on Colon Carcinogenesis in Rats Treated with Carcinogens.

Bertram Ira Cohen and Robert Franklin Raicht ........................................... 3759

Nature of Tissue-bound Lithocholic Acid and Its Implications in the Role of Bile Acids in Carcinogenesis.

Nabila Turjman and Padmanabhan P. Nair ........................................... 3761

Ultrastructural Modifications of Intestinal and Colonic Mucosa Induced by Free or Bound Bile Acids.

George V. Vahouny, Marie M. Cassidy, Fred Lightfoot, Lauretta Grau, and David Kritchevsky ........................................... 3764

Diet and Excretion of Bile Acids.

Bandaru S. Reddy ........................................... 3766

Animal Studies Implicating Fat and Fecal Steroids in Intestinal Cancer.

Norman D. Nigro ........................................... 3769

Effect of Diet on Excretion of Estrogens in Pre- and Postmenopausal Women.

Barry R. Goldin, Herman Adlercreutz, Johanna T. Dwyer, Linda Swenson, James H. Warram, and Sherwood L. Gorbach ........................................... 3771

Effects of Diet on the Fecal Excretion and Bacterial Modification of Acidic and Neutral Steroids, and Implications for Colon Carcinogenesis.

Ruth M. Kay ........................................... 3774

Diet and the Human Intestinal Bacterial Flora.

M. J. Hill ........................................... 3778

Summary, Conclusion, and Recommendations.

George V. Vahouny and Ruth Kay ........................................... 3781

WORKING GROUP IV

Lipids and the Immune System

Chairperson: Paul M. Newberne
Rapporteur: Gary B. Thurman

Dietary Fat, Immunological Response, and Cancer in Rats.

Paul M. Newberne ........................................... 3783

Plasma Lipoproteins with Bioregulatory Properties Including the Capacity to Regulate Lymphocyte Function and the Immune Response.

Thomas S. Edgington and Linda K. Curtiss ........................................... 3786

Difference in the Ability of Compactin and Oxidized Cholesterol, Both Known Inhibitors of Cholesterol Biosynthesis, to Suppress in Vitro Immune Responses.

Gillian M. K. Humphries ........................................... 3789

Cholesterol and Its Biosynthesis in Normal and Malignant Lymphocytes.

H. J. Heiniger ........................................... 3792

SEPTEMBER 1981 3679
Immune Response in Overnutrition.

R. K. Chandra

Impact of Infectious Disease upon Fat Metabolism and Immune Functions.

William R. Beisel

Inhibition by Membrane-bound Low-Density Lipoproteins of the Primary Inductive Events of Mitogen-stimulated Lymphocyte Activation.

Judith A. K. Harmony and David Y. Hui

Report and Recommendations.

Paul M. Newberne and Gary B. Thurman

WORKING GROUP V

Hormones, Fat, and Cancer

Chairperson: Samuel B. Tove
Rapporteur: Barnett Zumoff

Influence of Obesity and Malnutrition on the Metabolism of Some Cancer-related Hormones.

Barnett Zumoff

Mechanisms by Which Dietary Fat May Stimulate Mammary Carcinogenesis in Experimental Animals.

Leonard A. Cohen

Endocrine Parameters and α-Tocopherol Therapy of Patients with Mammary Dysplasia.

Robert S. London, G. S. Sundaram, Michael Schultz, P. P. Nair, and Phillip J. Goldstein

Serum Hormones and Lipoproteins in Benign Breast Disease.

G. S. Sundaram, Robert London, Simeon Margolis, Robert Wenk, Jack Lustgarten, P. P. Nair, and Phillip Goldstein

Environmental Factors and Breast and Prostatic Cancer.

P. Hill, L. Garbaczewski, P. Helman, A. R. P. Walker, H. Garnes, and E. L. Wynder

Hormones and Mouse Mammary Tumorigenesis.

Daniel Medina

Hormonal Regulation of the Metabolism of Carcinogens in Renal Tissue of BALB/c Mice.

Suresh Mohla, F. R. Ampy, K. J. Sanders, and Wayne E. Criss

Report and Recommendations.

Samuel B. Tove

Closing Remarks.

David Kritchevsky and Diane J. Fink